

September 18, 1974

Dr. Albert Rothenberg
Department of Psychiatry
Yale University School of Medicine
333 Cedar Street
New Haven, Connecticut 06510

Dear Dr. Rothenberg,

Thank you for your letter and the reprints. I was away on a trip for a few days and had with me some reading that concerned literary creativity; so as not to mystify you I enclose what I was looking for as well. At any rate, I ran across the attached passage that seemed to ring true and I made a note to have it copied out in order to send it to you. As it was on my desk waiting to be mailed, I went through the accumulated mail and then found your letter. So, I can give you some uncoached testimony about the role of Janusian thinking.

However, I would put less stress than you do on the pure dialectic and more on the simultaneous maintenance of multi-level imagery of diverse kinds. I do not see a clear demarkation between the combinatorial play that I mentioned to you during our interview and the simultaneous figuring of diverse images of a problem. Ambiguity, in the Empsonian sense, would be a convenient catchword. Particularly important in my view is the overlay of uninhibited phantasy with critical selection. This kind of variation on your theme does not, however, detract from what I believe to be its basic validity.

Thank you also for the reference and for the two reprints on WAT. Obviously I do not have the scores in front of me but I certainly must have given you very good raw material in support of your thesis! But I will recall we did have some discussion about the formation of specific strategies during the course of the WAT. If this has not been looked into before, it might be instructive to investigate whether there are differences in style between early and late sets of responses in the course of a given test.

I looked at your reference to Watson with particular interest. I do not think I would have extracted the same features with the same emphasis as you did. The anti-parallel orientation of chains is after all a fact of nature regardless of the creative process. But there is a deeper point that you may have missed if you are not familiar with the details of model building. The whole process of steric conformation is deeply intertwined with considerations of symmetry - that is to say how the same object looks from a variety of points in space. Whether the chains of DNA ran anti-parallel or not, a precise imagery of its

molecular structure requires an extraordinary capacity to think of what a given base looks like from its neighbors and vice versa. (I remember my young son when he was about 4 years old giving me a remarkable definition of symmetry when he remarked about the Stanford Medical School facade that you keep walking by it and it still looks just the same.)

Now, I suppose that if you look widely enough in the creative process you will find just about any element that you decide to seek. What does an assertion about Janusian thinking exclude by way of other alternatives of facile manipulation of raw intellectual data? How will we determine which of these "faculties" is the most important?

For my own part I think I would put rather heavy weight on multi-level thinking - looking at an item in very concrete terms and then at successive levels of abstraction as an important ingredient in a certain cognitive style. Just to illustrate what I am talking about, the fact that I was thinking about process in the course of the WAT at the same time as I was struggling to furnish responses. As you well know, others would be focusing on interpersonal meta-process rather than the cognitive one that I emphasized. And therein perhaps is the special talent that is not so uniformly distributed to occupy different kinds of roles.

Please let me know if I can be of any further assistance.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

JL/rr
Enclosure